=> FILE REG
FILE 'REGISTRY' ENTERED AT 16:11:47 ON 25 NOV 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 24 NOV 2003 HIGHEST RN 620531-14-8
DICTIONARY FILE UPDATES: 24 NOV 2003 HIGHEST RN 620531-14-8

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

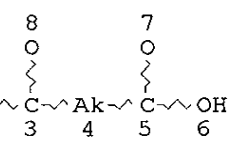
Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> FILE HCAPLUS
FILE 'HCAPLUS' ENTERED AT 16:11:52 ON 25 NOV 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 25 Nov 2003 VOL 139 ISS 22
FILE LAST UPDATED: 24 Nov 2003 (20031124/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE
L3 STR



Claim 2

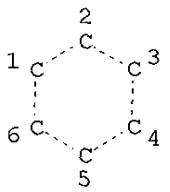
NODE ATTRIBUTES:

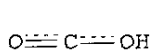
KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

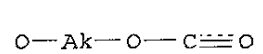
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE
L6 SCR 2043
L15 STR







Claim 5

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L20	5688	SEA FILE=REGISTRY SSS FUL (L3 OR L15) AND L6
L21	1039	SEA FILE=REGISTRY ABB=ON L20 AND 1/NC
L28	287	SEA FILE=REGISTRY ABB=ON L21 AND 1/NR
L30	752	SEA FILE=REGISTRY ABB=ON L21 NOT L28
L31	64147	SEA FILE=HCAPLUS ABB=ON L28
L32	771	SEA FILE=HCAPLUS ABB=ON L30
L33	499	SEA FILE=HCAPLUS ABB=ON L31(L)MOA/RL
L34	32	SEA FILE=HCAPLUS ABB=ON L32(L)MOA/RL
L35	7	SEA FILE=HCAPLUS ABB=ON L33 AND L34
L36	79	SEA FILE=HCAPLUS ABB=ON L31 AND L32
L37	6	SEA FILE=HCAPLUS ABB=ON L36 AND (RUBBER? OR ELASTOMER?)/SC,SX, AB,BI
L38	10	SEA FILE=HCAPLUS ABB=ON L35 OR L37

10 CA references with both Compounds

=> D L38 ALL 1-10 HITSTR

L38 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:750788 HCAPLUS
DN 139:277598
TI Recycling method and device for polyester resin using anhydride-glycol adducts
IN Kubota, Shizuo; Mori, Hajime; Maeda, Takuya
PA Wakayama Prefecture, Japan
SO Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G063-88
ICS C08J011-22; C08L067-00; C08L067-06

CC 38-2 (Plastics Fabrication and Uses)
Section cross-reference(s): 47

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003268098	A2	20030925	JP 2002-78938	20020320
PRAI	JP 2002-78938		20020320		

AB Using adduct products of maleic anhydride and/or itaconic anhydride and glycol, polyester resin, including saturated polyester, unsatd. polyesters, and fiber-reinforced plastic, can be decomposed with or without the presence of catalyst to obtain raw materials that can be used to synthesize unsatd. polyester by condensation polymerization, which can be further polymerized with unsatd. reactive monomers. A device composed of a reaction tanks, disturbing machine, heater, cooler, partial condenser, condenser, raw material tank, chemical injection tank, filter, and pump, is used for the recycling process. Thus, PET was decomposed by adduct of propylene glycol and maleic anhydride, and the decomposed composition was polymerized in the presence of hydroquinone to receive a unsatd. polyester, which was then mixing with styrene and curing at 30° and 100° to obtain the final product.

ST unsatd polyester PET maleic anhydride propylene glycol adduct recycling

IT Reinforced plastics
RL: PUR (Purification or recovery); PREP (Preparation)
(fiber-reinforced, glass fiber; recycling method and device for polyester using anhydride-glycol adducts)

IT Recycling of plastics and **rubbers**
(recycling method and device for polyester using anhydride-glycol adducts)

IT Polyesters, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(recycling method and device for polyester using anhydride-glycol adducts)

IT Polyesters, preparation
RL: IMF (Industrial manufacture); PREP (Preparation)
(unsatd., polymers with styrene; recycling method and device for polyester using anhydride-glycol adducts)

IT Polyesters, preparation
RL: PUR (Purification or recovery); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(unsatd.; recycling method and device for polyester using anhydride-glycol adducts)

IT 100-42-5DP, Styrene, polymers with unsatd. polyesters
RL: IMF (Industrial manufacture); PREP (Preparation)
(recycling method and device for polyester using anhydride-glycol adducts)

IT 57-55-6DP, Propylene glycol, reaction products with glycols and anhydrides 85-44-9DP, Phthalic anhydride, reaction products with glycols and anhydrides 107-21-1DP, Ethylene glycol, reaction products with anhydrides and optionally glycols 108-31-6DP, Maleic anhydride, reaction products with glycols and anhydrides 52338-72-4P 53212-68-3P **604802-71-3P** 605657-03-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(recycling method and device for polyester using anhydride-glycol adducts)

IT 37870-77-2DP, Ethylene glycol-phthalic acid-propylene glycol copolymer, reaction products with styrene-organic acid adduct

RL: PUR (Purification or recovery); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(recycling method and device for polyester using anhydride-glycol adducts)

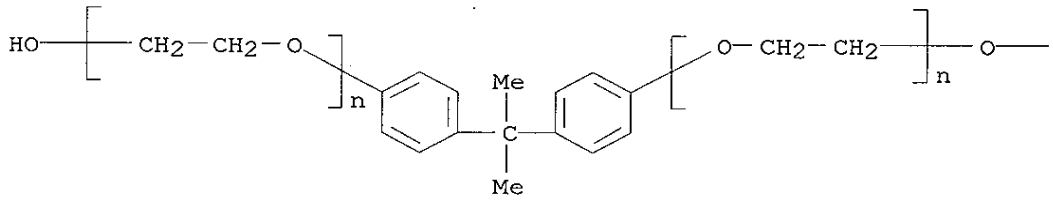
IT 57-55-6, Propylene glycol, reactions 85-44-9, Phthalic anhydride 107-21-1, Ethylene glycol, reactions 108-31-6, Maleic anhydride, reactions 556-48-9, 1,4-Cyclohexanediol **25038-59-9**, PET polymer, reactions 32492-61-8, Ethoxylated bisphenol A
RL: RCT (Reactant); RACT (Reactant or reagent)
(recycling method and device for polyester using anhydride-glycol adducts)

IT **604802-71-3P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(recycling method and device for polyester using anhydride-glycol adducts)

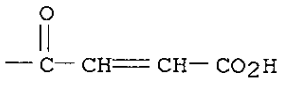
RN 604802-71-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), ω-[[(2Z)-3-carboxy-1-oxo-2-propenyl]oxy]-ω'-hydroxy-α,α'-[(1-methylethylidene)di-4,1-phenylene]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



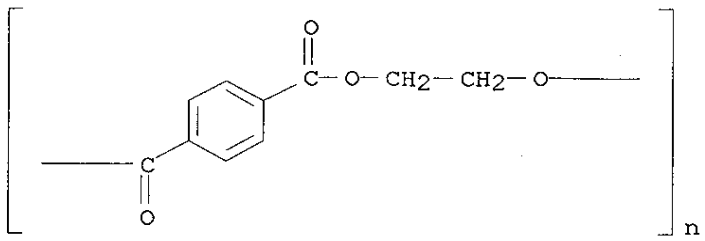
PAGE 1-B



IT **25038-59-9**, PET polymer, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(recycling method and device for polyester using anhydride-glycol adducts)

RN 25038-59-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



L38 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:392948 HCAPLUS
DN 139:134723
TI Synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers
AU Saint-Loup, Rene; Robin, Jean-Jacques; Boutevin, Bernard
CS Laboratory of Macromolecular Chemistry, UMR (CNRS) 5076, Ecole Nationale Superieure de Chimie de Montpellier, Montpellier, 34296, Fr.
SO Macromolecular Chemistry and Physics (2003), 204(7), 970-982
CODEN: MCHPES; ISSN: 1022-1352
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
CC 39-4 (Synthetic **Elastomers** and Natural **Rubber**)
Section cross-reference(s): 37
AB The synthesis of thermoplastic **elastomer** compds. by direct copolyesterification of reactive oligomers of poly(ethylene terephthalate) (PET) and of poly(tetramethylene oxide) (PTMO) was studied. PET was glycolyzed to synthesize hydroxytelechelic oligomers of PET. Com. available hydroxytelechelic PTMO was modified to synthesize carboxytelechelic oligomers. The chemical structures of these oligomers were investigated by 1H NMR and size exclusion chromatog. Multiblock poly(ester-ether) was then obtained by polyesterification of the hydroxytelechelic and carboxytelechelic oligomers, using different catalysts and different reaction conditions. The best stoichiometric ratio was determined to lead to the highest .hivin.Mn. The chemical structure of the synthesized poly(ester-ether) was investigated by size exclusion chromatog. and 1H NMR. The thermal and thermomech. behavior of the synthesized poly(ester-ether) was investigated by differential scanning calorimetry and by dynamic mech. anal., and showed a thermoplastic **elastomer** behavior. This product could also be an interesting way of chemical recycling PET waste.
ST thermoplastic **elastomer** polyesterification oligomeric polyester polyoxyalkylene; polyethylene terephthalate oligomer polyesterification polytetramethylene glycol
IT Glass transition temperature
Loss modulus
Melting point
Storage modulus
(of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)
IT Polyesters, preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(oligomeric; in synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT Polyoxyalkylenes, preparation
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyester-, block, **elastomeric**; synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT Synthetic **rubber**, preparation
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyester-polyoxyalkylene, block; synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT Thermoplastic **rubber**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyester-polyoxyalkylene; synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT Polymerization
(polyesterification; synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT Polyesters, preparation
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyoxyalkylene-, block, **elastomeric**; synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT Polyester **rubber**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polyoxyalkylene-, block; synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT Complex modulus
(tan δ; of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT 108793-02-8P, Ethylene glycol-THF-terephthalic acid block copolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(multiblock; synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT **25038-59-9P**, Poly(ethylene terephthalate), preparation
95401-56-2P, Polytetramethylene glycol disuccinate 568526-48-7P, THF homopolymer ester with succinic acid (1:2)
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(oligomeric; in synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

IT 818-08-6, Dibutyl tin oxide 5593-70-4, Tetrabutoxytitanium 17501-44-9, Zirconium acetyl acetonate
RL: CAT (Catalyst use); USES (Uses)
(polymerization catalyst; synthesis of poly(ethylene terephthalate)-block-poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Bai, R; CN 1073164 1993 HCAPLUS
(2) Birley, A; Polymer 1978, V19, P14

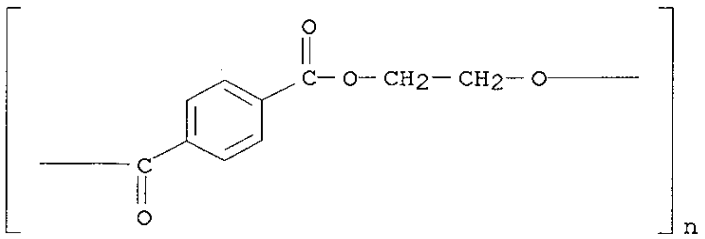
(3) Bottino, F; Macromolecules 1998, V31, P7814 HCAPLUS
(4) Boutevin, B; J Appl Polym Sci 1995, V55, P191 HCAPLUS
(5) Boutevin, B; Polym Eng Sci 1996, V36, P879 HCAPLUS
(6) Boyaud, M; Annual Tech Conf Soc Plast Eng 2000, V58(3), P3665
(7) Chen, C; Chin J Polym Sci 1989, V7, P143 HCAPLUS
(8) Deleens, G; Thermoplastic Elastomers 1987, P215
(9) Dupont, L; J Vinyl Technol 1993, V15, P100 HCAPLUS
(10) Durand, G; WP 9746611 1997 HCAPLUS
(11) Fleury, E; WP 9841558 1998
(12) Gabrieelese, W; Macromolecules 2001, V34, P1685
(13) Hoeschele, G; US 3904756 1974 HCAPLUS
(14) Hubert, F; J Appl Polym Sci 1999, V72, P329 HCAPLUS
(15) Kim, J; Pollimo 1995, V19, P353 HCAPLUS
(16) Kiyotsukuri, T; Polymer 1995, V36, P2629 HCAPLUS
(17) Lee, S; J Chin Inst Chem Eng 1995, V26, P289 HCAPLUS
(18) Luo, X; Chin J Polym Sci 2000, V18, P357 HCAPLUS
(19) Lusinchi, I; J Appl Polym Sci 1998, V69, P657 HCAPLUS
(20) Lusinchi, J; J Appl Polym Sci 2000, V79, P874
(21) Michel, A; FR 0107550 2001
(22) Nagata, M; Polym Int 1996, V39, P83 HCAPLUS
(23) Ostrysz, R; PL 150126 1990 HCAPLUS
(24) Ostrysz, R; Polimery 2000 Seminar 1995
(25) Ostryz, R; PL 76005 1964 HCAPLUS
(26) Ostryz, R; Polimery 1970, V15, P406
(27) Paszun, D; Proceedings of the National Conference on Polymers *Environment*Recycling 1995, P221
(28) Pepper, T; US 5380793 1995 HCAPLUS
(29) Pesneau, I; J Appl Polym Sci 1997, V65, P2457 HCAPLUS
(30) Pilati, F; Chim Ind (Milan) 1992, V74, P678 HCAPLUS
(31) Pilati, F; Macromolecules 1990, V23, P348 HCAPLUS
(32) Pilati, F; Polym Recycl 1996, V2, P35 HCAPLUS
(33) Pu, Z; Polymer 1999, V40, P4695 HCAPLUS
(34) Rebeiz, K; J Appl Polym Sci 1992, V44, P164
(35) Rebeiz, K; Trends Polym Sci 1993, V1, P315 HCAPLUS
(36) Saint-Loup, R; Macromol Chem Phys 2002, V203, P1249 HCAPLUS
(37) Saint-Loup, R; Polymer, accepted
(38) Sayre, D; CA 2087913 1993 HCAPLUS
(39) Schiraldi, D; Abstr Pap-Am Chem Soc 2001, V221(POLY-321)
(40) Schiraldi, D; Polym Prepr (Am Chem Soc, Div Polym Chem) 2001, V42(1), P221 HCAPLUS
(41) Schmidt, A; Macromolecules 1998, V31, P1652 HCAPLUS
(42) Shi, Y; Polym Int 1995, V38, P357 HCAPLUS
(43) Tersac, G; Caoutch Plast 1991, V68, P81 HCAPLUS
(44) Torres, N; J Appl Polym Sci 2001, V81, P2377 HCAPLUS
(45) Torres, N; Ph D thesis, University of Montpellier II 1998
(46) Toselli, M; Polym Recycl 1996, V2, P27 HCAPLUS
(47) Vaidya, U; Polym Mater Sci Eng 1990, V63, P1029 HCAPLUS
(48) Wang, J; Huaxue Shijie 1991, V32, P208 HCAPLUS
(49) Wang, M; Eur Polym J 1998, V34, P1 HCAPLUS
(50) Wang, M; J Polym Sci, Part B: Polym Phys 1999, V37, P2928 HCAPLUS
(51) Watanabe, H; JP 04258631 1992 HCAPLUS
(52) Witsiepe, W; DE 2035333 1971 HCAPLUS
(53) Witsiepe, W; US 3766146 1973 HCAPLUS

IT **25038-59-9P**, Poly(ethylene terephthalate), preparation
95401-56-2P, Polytetramethylene glycol disuccinate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(oligomeric; in synthesis of poly(ethylene terephthalate)-block-

poly(tetramethylene oxide) copolymer by direct polyesterification of reactive oligomers)

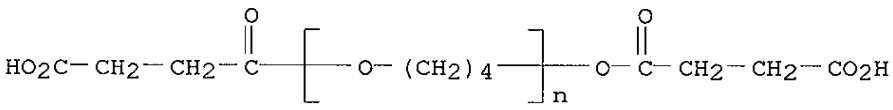
RN 25038-59-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



RN 95401-56-2 HCAPLUS

CN Poly(oxy-1,4-butanediyl), α-(3-carboxy-1-oxopropyl)-ω-(3-carboxy-1-oxopropoxy)- (9CI) (CA INDEX NAME)



L38 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:309358 HCAPLUS

DN 138:322527

TI Natural **rubber** master batches with good viscosity stability, and their manufacture

IN Nohara, Daisuke; Tsuchihashi, Masaaki; Nishi, Isao; Takano, Tetsuo

PA Bridgestone Corp., Japan; Kao Corp.

SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L007-00
ICS C08J003-22; C08K003-04; C08K003-34; C08K005-10; C08L071-02

CC 39-9 (Synthetic **Elastomers** and Natural **Rubber**)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003119319	A2	20030423	JP 2001-310496	20011005
PRAI	JP 2001-310496		20011005		

OS MARPAT 138:322527

AB The master batches contain aliphatic polycarboxylic acid (poly)oxyalkylene esters and/or B(CO2H)n[CO2(R1O)mR2]p(R3)q (m, n, p ≥ 1; q ≥ 0; n + p + q = 6-8; B = aromatic ring; R1 = alkylene; R2 = alkyl, alkenyl, alkylaryl, acyl; R3 = H, alkyl, alkenyl) and 10-200 phr fillers. Thus, a master batch comprising natural **rubber** 100, maleic acid mono(polyoxypropylene lauryl ether) ester 5, and carbon black 100 parts showed Mooney viscosity 94 and 100 before and after storage at room temperature for 60 days, resp., and good handling property.

ST natural **rubber** polyoxyalkylene polycarboxylate viscosity stability; polyoxypropylene maleate natural **rubber** master batch

IT Carbon black, uses
RL: MOA (Modifier or additive use); USES (Uses)
(filler; natural **rubber** master batches containing polyoxyalkylene polycarboxylates as viscosity stabilizers)

IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(hydroxy-terminated, esters with polycarboxylic acids; natural **rubber** master batches containing polyoxyalkylene polycarboxylates as viscosity stabilizers)

IT Stabilizing agents
(natural **rubber** master batches containing polyoxyalkylene polycarboxylates as viscosity stabilizers)

IT Natural **rubber**, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(natural **rubber** master batches containing polyoxyalkylene polycarboxylates as viscosity stabilizers)

IT Carboxylic acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polycarboxylic, esters with hydroxy-terminated polyoxyalkylenes; natural **rubber** master batches containing polyoxyalkylene polycarboxylates as viscosity stabilizers)

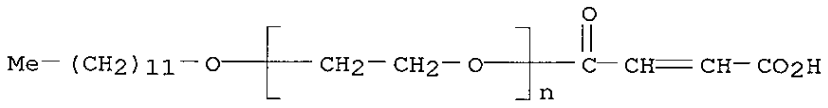
IT 7631-86-9, Silica, uses
RL: MOA (Modifier or additive use); USES (Uses)
(filler; natural **rubber** master batches containing polyoxyalkylene polycarboxylates as viscosity stabilizers)

IT **53123-50-5 124934-00-5** 397874-03-2 514209-39-3 514209-41-7
RL: **MOA (Modifier or additive use)**; USES (Uses)
(natural **rubber** master batches containing polyoxyalkylene polycarboxylates as viscosity stabilizers)

IT **53123-50-5 124934-00-5**
RL: **MOA (Modifier or additive use)**; USES (Uses)
(natural **rubber** master batches containing polyoxyalkylene polycarboxylates as viscosity stabilizers)

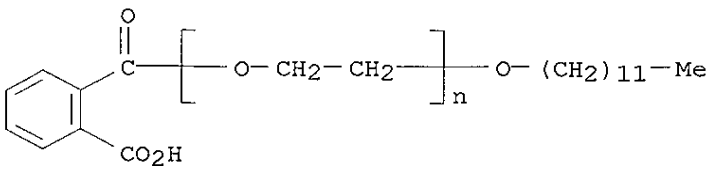
RN 53123-50-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-[(2Z)-3-carboxy-1-oxo-2-propenyl]-ω-(dodecyloxy)- (9CI) (CA INDEX NAME)



RN 124934-00-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(2-carboxybenzoyl)-ω-(dodecyloxy)- (9CI) (CA INDEX NAME)



L38 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:309357 HCAPLUS
DN 138:322514
TI Gelation-resistant natural **rubbers** and their manufacture
IN Nohara, Daisuke; Tsuchihashi, Masaaki; Nishi, Isao; Takano, Tetsuo
PA Bridgestone Corp., Japan; Kao Corp.
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L007-00
ICS C08J003-20; C08L071-02
CC 39-3 (Synthetic **Elastomers** and Natural **Rubber**)
FAN.CNT 1

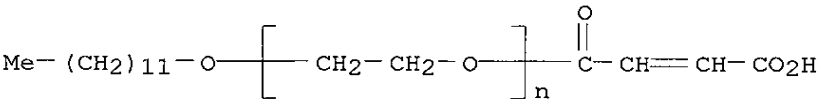
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003119318	A2	20030423	JP 2001-310451	20011005
PRAI	JP 2001-310451		20011005		

OS MARPAT 138:322514
AB The **rubbers** contain aliphatic polycarboxylic acid (poly)oxyalkylene esters and/or B(CO2H)n[CO2(R1O)mR2]p(R3)q (m, n, p ≥ 1; q ≥ 0; n + p + q = 6-8; B = aromatic ring; R1 = alkylene; R2 = alkyl, alkenyl, alkylaryl, acyl; R3 = H, alkyl, alkenyl). Thus, 3 parts maleic acid mono(polyoxypropylene lauryl ether) ester was added to 100 parts natural **rubber** latex to give **rubber** showing gel content 17% and Mooney viscosity 78 after storage at room temperature for 60 days.
ST natural **rubber** additive polyoxyalkylene polycarboxylate ester; gelation prevention natural **rubber** polyoxypropylene maleate
IT Natural **rubber**, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(gelation-resistant natural **rubbers** containing polycarboxylic acid polyoxyalkylene esters)
IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(hydroxy-terminated, esters with polycarboxylic acids; gelation-resistant natural **rubbers** containing polycarboxylic acid polyoxyalkylene esters)
IT Gelation agents
(inhibitors; gelation-resistant natural **rubbers** containing polycarboxylic acid polyoxyalkylene esters)
IT Carboxylic acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polycarboxylic, esters with hydroxy-terminated polyoxyalkylenes; gelation-resistant natural **rubbers** containing polycarboxylic acid polyoxyalkylene esters)
IT **53123-50-5 124934-00-5** 136972-37-7 514209-39-3 514209-41-7
RL: **MOA (Modifier or additive use)**; USES (Uses)

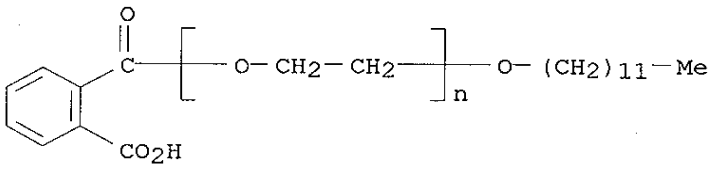
(gelation-resistant natural **rubbers** containing polycarboxylic acid polyoxyalkylene esters)

IT **53123-50-5 124934-00-5**
RL: **MOA (Modifier or additive use)**; USES (Uses)
(gelation-resistant natural **rubbers** containing polycarboxylic acid polyoxyalkylene esters)

RN 53123-50-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[(2Z)-3-carboxy-1-oxo-2-propenyl]-ω-(dodecyloxy)- (9CI) (CA INDEX NAME)



RN 124934-00-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(2-carboxybenzoyl)-ω-(dodecyloxy)- (9CI) (CA INDEX NAME)



L38 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:119310 HCAPLUS
DN 136:168812
TI Additive composition for **rubber** compositions for tires
IN Nohara, Daisuke; Shirasaka, Jingo; Nishi, Isao; Tsuchihashi, Masaaki; Takano, Tetsuo
PA Bridgestone Corporation, Japan; Kao Corporation
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C08K005-11
ICS C08K005-12; C08K005-1539; C08L021-00; C08L009-00; C08L007-00; B60C001-00
CC 39-9 (Synthetic **Elastomers** and Natural **Rubber**)

applicants

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1179561	A1	20020213	EP 2001-306713	20010806
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2002042462	A1	20020411	US 2001-923533	20010808
	JP 2002121330	A2	20020423	JP 2001-240962	20010808
	JP 2002256113	A2	20020911	JP 2001-373309	20011206
PRAI	JP 2000-239503	A	20000808		
	JP 2000-397565	A	20001227		

OS MARPAT 136:168812

AB An additive for a **rubber** composition consists essentially of an ester of (i) an aliphatic polyvalent carboxylic acid with (iii) a (poly)oxyalkylene derivative, and having at least one carboxyl group in its mol., or an ester of (ii) an aromatic polyvalent carboxylic acid with (iii) a (poly)oxyalkylene derivative, and having at least one carboxyl group bonded to an aromatic ring in its mol. And also, it relates to an additive composition, a **rubber** composition and a pneumatic tire using such an additive for a **rubber** composition

ST polyoxyalkylene polycarboxylic acid ester additive **rubber** tire

IT Tires
(additive composition for **rubber** compns. for tires)

IT **Rubber**, uses
RL: POF (Polymer in formulation); USES (Uses)
(additive composition for **rubber** compns. for tires)

IT Natural **rubber**, properties
Styrene-butadiene **rubber**, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(additive composition for **rubber** compns. for tires)

IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polycarboxylic acid esters; additive composition for **rubber** compns. for tires)

IT Carboxylic acids, properties
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(polycarboxylic, aliphatic, (poly)oxyalkylene esters; additive composition for **rubber** compns. for tires)

IT Carboxylic acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polycarboxylic, aromatic, (poly)oxyalkylene esters; additive composition for **rubber** compns. for tires)

IT **37314-86-6 53123-50-5 397332-14-8**
397874-03-2 **397874-04-3 397874-05-4**
397874-06-5 397874-07-6 397874-08-7
397874-09-8 **397874-10-1**
RL: **MOA (Modifier or additive use)**; USES (Uses)
(additive composition for **rubber** compns. for tires)

IT 9003-55-8
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(styrene-butadiene **rubber**, additive composition for **rubber** compns. for tires)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

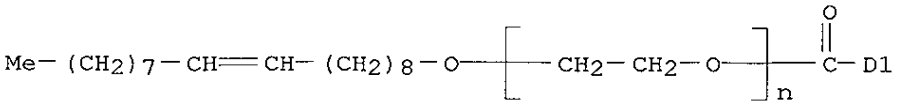
(1) Bridgestone Corp; EP 1026196 A 2000 HCAPLUS
(2) Kao Corp; EP 0867468 A 1998 HCAPLUS
(3) Kao Corp; EP 0869145 A 1998 HCAPLUS

IT **37314-86-6 53123-50-5 397332-14-8**
397874-04-3 397874-05-4 397874-06-5
397874-07-6 397874-08-7 397874-10-1
RL: **MOA (Modifier or additive use)**; USES (Uses)
(additive composition for **rubber** compns. for tires)

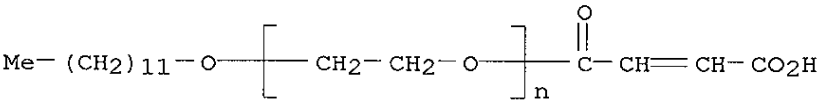
RN 37314-86-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(carboxybenzoyl)-ω-[(9Z)-9-octadecenyloxy]- (9CI) (CA INDEX NAME)

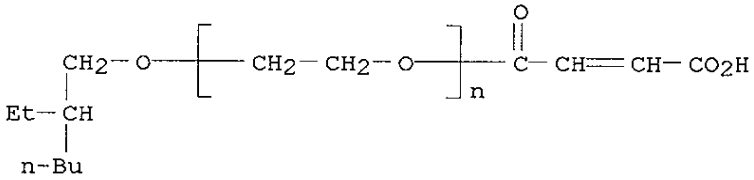
D1—CO_2H



RN 53123-50-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[(2Z)-3-carboxy-1-oxo-2-propenyl]-ω-(dodecyloxy)- (9CI) (CA INDEX NAME)

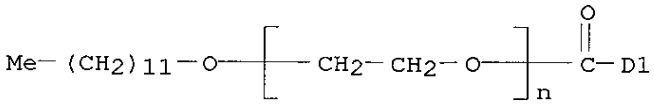


RN 397332-14-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[(2Z)-3-carboxy-1-oxo-2-propenyl]-ω-[(2-ethylhexyl)oxy]- (9CI) (CA INDEX NAME)



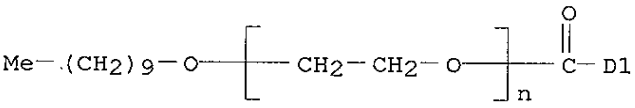
RN 397874-04-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(carboxybenzoyl)-ω-(dodecyloxy)- (9CI) (CA INDEX NAME)

D1—CO_2H



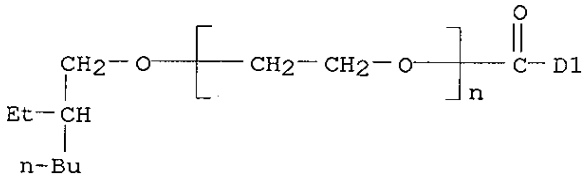
RN 397874-05-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(carboxybenzoyl)-ω-(decyloxy)- (9CI) (CA INDEX NAME)

D1—CO_2H



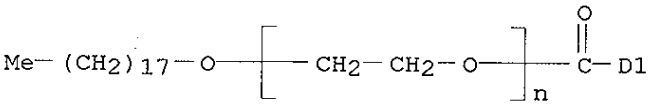
RN 397874-06-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(carboxybenzoyl)-ω-[(2-ethylhexyl)oxy]- (9CI) (CA INDEX NAME)

D1—CO_2H

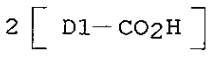


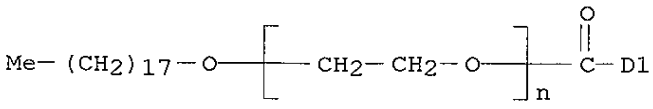
RN 397874-07-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(carboxybenzoyl)-ω-(octadecyloxy)- (9CI) (CA INDEX NAME)

D1—CO_2H

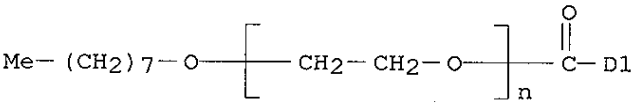


RN 397874-08-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(dicarboxybenzoyl)-ω-(octadecyloxy)- (9CI) (CA INDEX NAME)





RN 397874-10-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(dicarboxybenzoyl)-ω-(octyloxy)- (9CI) (CA INDEX NAME)



L38 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:317250 HCAPLUS
DN 130:353321
TI Polymers for use in photography and ink-jet printing
IN Bell, Peter; Helling, Guenter; Weber, Beate; Buescher, Ralf; Endres, Lothar; Rosenhahn, Lothar; Scheerer, Rainer; Simon, Lydia; Stetzer, Thomas
PA Agfa-Gevaert A.-G., Germany
SO Ger. Offen., 17 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C08L067-00
ICS G03C001-795; G03C001-04; G03C001-46
ICA G03C007-46
ICI C08L067-00, C08K005-09, C08K005-42, C08K005-524
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19749721	A1	19990512	DE 1997-19749721	19971111
	US 6207283	B1	20010327	US 1998-185150	19981103
PRAI	DE 1997-19749721	A	19971111		

AB The polymer has the structure X1[L2O2CL1(R1)lCO]nX2 [L1 = (cyclo)alkylene, arylene, aralkylene; L2 = residue of polyether with number-average mol. weight 200-3000; R1 = CO2M, SO3M, PO(PM)2 (M+ = cation); X1 = H, COL1(R1)l+1; X2 = (L2)mOH, (L2)mCOL1(R1)l+1; l = 0-4; m = 0, 1; n = 0-20; m + n ≥ 1] and is useful in Ag halide layers of photog. film and in ink-jet media. Addition of polytetramethylene glycol (d.p. .apprx.9) mono(sulfosuccinate) to the layers with high sensitivity to red, green, and blue light in a AgI color photog. film permitted achieving a similar sensitivity and gradation at a lower Ag content.

ST polyoxyalkylene polyester addn color photog film

IT Photographic films
(color; polymers for use in photog.)

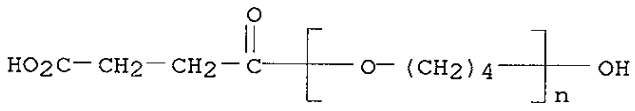
IT Ink-jet printing
(receptors; polymers for use in)

IT **125925-81-7 224565-55-3** 224639-65-0
224639-70-7
RL: **MOA (Modifier or additive use)**; USES (Uses)
(polymers for use in photog.)

IT **125925-81-7 224565-55-3 224639-70-7**
RL: **MOA (Modifier or additive use)**; USES (Uses)
(polymers for use in photog.)

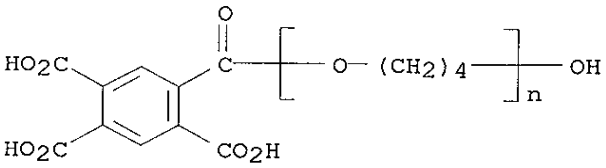
RN 125925-81-7 HCAPLUS

CN Poly(oxy-1,4-butanediyl), α-(3-carboxy-1-oxopropyl)-ω-hydroxy- (9CI) (CA INDEX NAME)



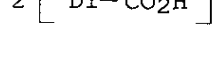
RN 224565-55-3 HCAPLUS

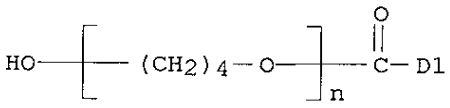
CN Poly(oxy-1,4-butanediyl), α-(2,4,5-tricarboxybenzoyl)-ω-hydroxy- (9CI) (CA INDEX NAME)



RN 224639-70-7 HCAPLUS

CN Poly(oxy-1,4-butanediyl), α-(dicarboxybenzoyl)-ω-hydroxy- (9CI) (CA INDEX NAME)





L38 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:380097 HCAPLUS
DN 123:171368
TI Unsaturated pendant-containing organic titanate compounds for improving the compatibility of fillers in plastics
IN Tanaka, Sukeyuki; Chiba, Naoki; Zama, Taku
PA Ajinomoto Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08K009-04
ICS C08K005-56
CC 37-6 (Plastics Manufacture and Processing)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06145419	A2	19940524	JP 1992-301214	19921111
	JP 3144443	B2	20010312		
PRAI	JP 1992-301214		19921111		

OS MARPAT 123:171368
AB The title titanate compds. useful as surface coatings for fillers bear functional groups which are introduced by the reaction of an alkyl titanate ester with alcs., carboxylic acids, sulfonic acids, pyrophosphate esters and/or phosphate esters, (meth)allyloxy- or (meth)acryloyloxy-(poly)alkylene oxide mono-esters of maleic acids or/and phthalic acids and (meth)allyloxy- or/and (meth)acryloyloxy-(poly)alkylene oxide mono-ethers of glycerin at specified molar ratios.
ST titanate ester compatibility improver filler plastic; phosphate titanate ester compatibility improver filler; carboxylate titanate ester compatibility improver filler; sulfonate titanate ester compatibility improver filler; pyrophosphonate titanate ester compatibility improver; phthalate titanate ester compatibility improver filler; maleate titanate ester compatibility improver filler
IT Coupling agents
(unsatd. pendant-containing organic titanate compds.; for improving compatibility of fillers in plastics)
IT Polyesters, uses
RL: POF (Polymer in formulation); USES (Uses)

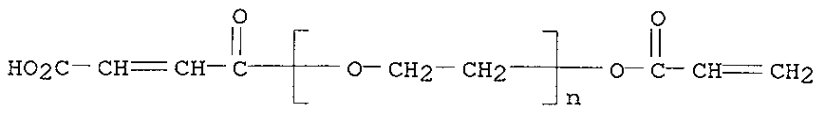
(unsatd., unsatd. pendant-containing organic titanate compds. for improving compatibility of fillers in plastics)

IT 546-68-9D, Tetraisopropyl titanate, transesterification products 88859-58-9D, reaction products with titanates 161174-70-5D, reaction products with titanates 161174-71-6D, reaction products with titanates **161174-72-7D**, reaction products with titanates 161174-73-8D, reaction products with titanates 166334-12-9D, reaction products with titanates 167503-97-1D, reaction products with titanates
RL: **MOA (Modifier or additive use)**; USES (Uses)
(compatibility improvers; unsatd. pendant-containing organic titanate compds.
for improving compatibility of fillers in plastics)

IT 141-97-9D, Ethyl acetoacetate, reaction products with titanates 2424-58-0D, Monoallyl maleate, reaction products with titanates 2724-58-5D, reaction products with titanates 3115-39-7D, Dioctylphosphate, reaction products with titanates 3882-14-2D, reaction products with titanates 3944-72-7D, 1-Octanesulfonic acid, reaction products with titanates 5919-74-4D, reaction products with titanates 10095-20-2D, reaction products with titanates 27697-00-3D, reaction products with titanates **58868-83-0D**, reaction products with titanates 70938-04-4D, Oleyl acetoacetate, reaction products with titanates 118181-77-4D, reaction products with titanates **127079-01-0D**, reaction products with titanates 137587-53-2D, reaction products with titanates 151036-49-6D, reaction products with titanates 161174-74-9D, reaction products with titanates **161174-75-0D**, reaction products with titanates 161174-77-2D, reaction products with titanates 161174-79-4D, reaction products with titanates 166334-13-0D, reaction products with titanates
RL: **MOA (Modifier or additive use)**; USES (Uses)
(unsatd. pendant-containing organic titanate compds. for improving compatibility of fillers in plastics)

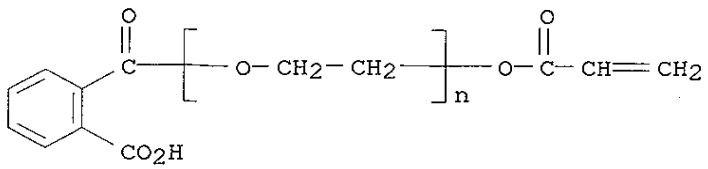
IT **161174-72-7D**, reaction products with titanates
RL: **MOA (Modifier or additive use)**; USES (Uses)
(compatibility improvers; unsatd. pendant-containing organic titanate compds.
for improving compatibility of fillers in plastics)

RN 161174-72-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(3-carboxy-1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)

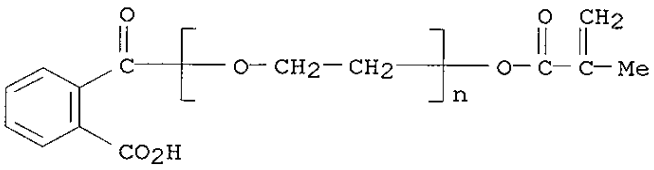


IT **58868-83-0D**, reaction products with titanates **127079-01-0D**, reaction products with titanates **161174-75-0D**, reaction products with titanates
RL: **MOA (Modifier or additive use)**; USES (Uses)
(unsatd. pendant-containing organic titanate compds. for improving compatibility of fillers in plastics)

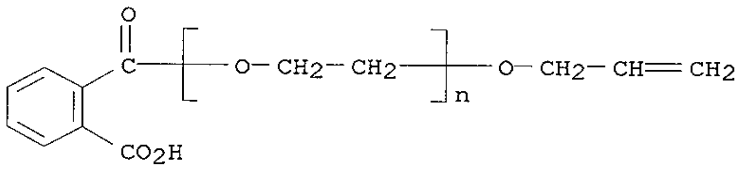
RN 58868-83-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(2-carboxybenzoyl)-ω-[(1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)



RN 127079-01-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(2-carboxybenzoyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)



RN 161174-75-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(2-carboxybenzoyl)-ω-(2-propenyloxy)- (9CI) (CA INDEX NAME)



L38 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:299778 HCAPLUS
DN 122:68316
TI Positive-working photosensitive resin composition
IN Adachi, Yutaka; Shimizu, Kunio; Masuda, Tetsuya; Mochizuki, Hideaki
PA Konishiroku Photo Ind, Japan; Mitsubishi Chem Ind
SO Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-039
ICS G03F007-004; G03F007-022
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06118648	A2	19940428	JP 1991-350106	19911210
PRAI	JP 1991-350106		19911210		

AB The title composition comprises (1) a polymer compound containing RCOOCH:CH2 [R = C1-17 alkyl] in the structure, (2) ≥1 compound selected from an

acrylic acid, a methacrylic acid, an acrylate, and a methacrylate, (3) a compound releasing a radical upon irradiation of light. The title composition also comprises (a) a quinonediazide compound, (b) ≥1 compound 1-40 % selected from an acrylic acid, a methacrylic acid, an acrylate, and a methacrylate relative to 100 % of (a), and (c) a compound releasing a radical upon irradiation of light.

ST pos working photosensitive resin compn; quinonediazide compd photosensitive resin compn

IT Lithographic plates
Printing plates
(color-proofs; pos.-working photosensitive resin composition)

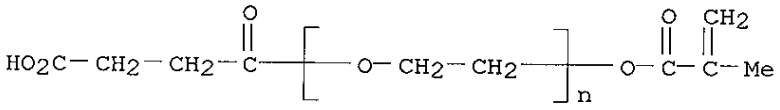
IT Photoimaging compositions and processes
(pos.-working photosensitive resin composition)

IT 79-10-7, 2-Propenoic acid, uses 79-41-4, uses 20882-04-6 50940-49-3 61615-46-1 68584-99-6 **85226-98-8** 128087-36-5 160281-02-7 **160281-03-8**
RL: **MOA (Modifier or additive use)**; TEM (Technical or engineered material use); USES (Uses)
(pos.-working photosensitive resin composition)

IT **85226-98-8 160281-03-8**
RL: **MOA (Modifier or additive use)**; TEM (Technical or engineered material use); USES (Uses)
(pos.-working photosensitive resin composition)

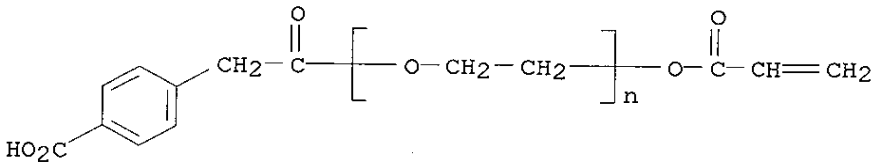
RN 85226-98-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(3-carboxy-1-oxopropyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)



RN 160281-03-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-[(4-carboxyphenyl)acetyl]-ω-[(1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)



L38 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1994:704042 HCAPLUS

DN 121:304042

TI Fire resistant hydraulic fluids

IN Bohen, Joseph M.; Tubbs, Paul

PA Elf Atochem North America, Inc., USA

SO U.S., 30 pp. Cont.-in-part of U.S. Ser. No. 258,267, abandoned.
CODEN: USXXAM

DT Patent

LA English
IC ICM C09K005-00
NCL 252079000
CC 48-11 (Unit Operations and Processes)
Section cross-reference(s): 59
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5328627	A	19940712	US 1990-508744	19900412
	CA 1337191	A1	19951003	CA 1989-611070	19890912
	AU 8941415	A1	19900426	AU 1989-41415	19890914
	JP 02209996	A2	19900821	JP 1989-264072	19891012
	DD 299824	A5	19920507	DD 1989-333592	19891012
	DK 8905089	A	19900417	DK 1989-5089	19891013
	BR 8905219	A	19900515	BR 1989-5219	19891013
	CA 2058426	AA	19911013	CA 1991-2058426	19910409
	WO 9116389	A1	19911031	WO 1991-US2414	19910409
	W: AU, BB, BG, BR, CA, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9178648	A1	19911111	AU 1991-78648	19910409
	EP 477360	A1	19920401	EP 1991-909444	19910409
	EP 477360	B1	19950705		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	BR 9105711	A	19920804	BR 1991-5711	19910409
	JP 05501131	T2	19930304	JP 1991-509134	19910409
PRAI	US 1988-258267	B2	19881014		
	US 1990-508744	A	19900412		
	WO 1991-US2414	A	19910409		

AB Fire resistant hydraulic fluid compns. comprise (a) ≥1 esters of polyhaloarom. acids per se or in combination with (b) ≥1 hydraulic fluids selected sep. from mineral oil, poly α-olefins, alkylated aroms., cycloaliphatics, esters of dibasic acids, polyol esters, polyglycols, silicones, silicate esters, phosphate esters, and halogenated compns. other than (a); a method for imparting fire resistance to known hydraulic fluids involves adding ≥1 esters of polyhaloarom. acids alone or combined. The fire resistant compns. may, optionally, contain ≥1 shear-stable polymers which have been found to increase the fire resistant of the hydraulic fluid composition

ST fire resistant hydraulic fluid

IT Cyclic compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(aliphatic, base oil; fire resistant hydraulic fluids)

IT Polyethers, uses
Siloxanes and Silicones, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(base oil; fire resistant hydraulic fluids)

IT Esters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(dibasic acids, base oil; fire resistant hydraulic fluids)

IT Phosphates, uses
Silicates, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(esters, base oil; fire resistant hydraulic fluids)

IT Polyesters, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fire resistant hydraulic fluids)

IT Polyoxyalkylenes, uses

RL: MOA (Modifier or additive use); USES (Uses)
(glycol ethers; fire resistant hydraulic fluids)

IT Hydrocarbon oils
RL: TEM (Technical or engineered material use); USES (Uses)
(mineral base oil; fire resistant hydraulic fluids)

IT Glycols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(alkoxylated, fire resistant hydraulic fluids)

IT Aromatic compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(alkyl, base oil; fire resistant hydraulic fluids)

IT Hydraulic fluids
(fire-resistant, fire resistant hydraulic fluids)

IT Fire-resistant materials
(hydraulic fluids, fire resistant hydraulic fluids)

IT Halogen compounds
RL: TEM (Technical or engineered material use); USES (Uses)
(organic, dibasic acids, base oil; fire resistant hydraulic fluids)

IT Alcohols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyhydric, esters, dibasic acids, base oil; fire resistant hydraulic fluids)

IT Alkenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(α-, polymers, base oil; fire resistant hydraulic fluids)

IT 159446-72-7, Acryloid 704
RL: MOA (Modifier or additive use); USES (Uses)
(Acryloid 704; fire resistant hydraulic fluids)

IT 1330-78-5, Tricresyl phosphate
RL: MOA (Modifier or additive use); USES (Uses)
(Durad 124; fire resistant hydraulic fluids)

IT 28777-70-0, Durad 220B
RL: MOA (Modifier or additive use); USES (Uses)
(Durad 220B; fire resistant hydraulic fluids)

IT 57675-44-2, Trimethylolpropane trioleate
RL: MOA (Modifier or additive use); USES (Uses)
(Hatco 4323; fire resistant hydraulic fluids)

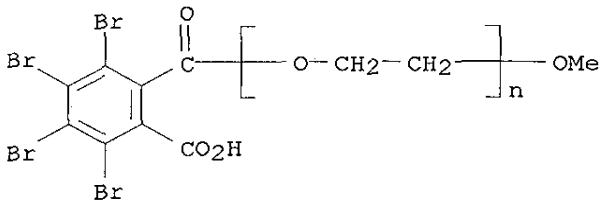
IT 42222-50-4, Neopentylglycol dioleate
RL: MOA (Modifier or additive use); USES (Uses)
(Hatcol 4322; fire resistant hydraulic fluids)

IT 9003-55-8, Butadiene-styrene polymers
RL: MOA (Modifier or additive use); USES (Uses)
(Lubrizol 7443; fire resistant hydraulic fluids)

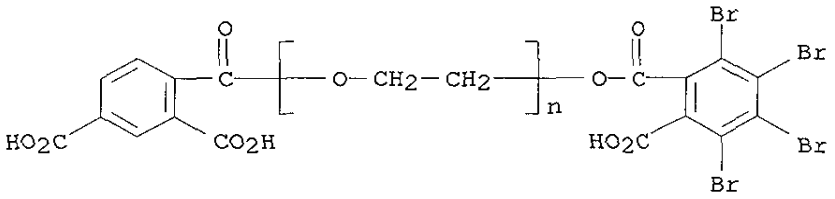
IT 88-99-3D, Phthalic acid, halo derivs., esters 3475-89-6 3475-91-0
9003-01-4D, Polyacrylic acid, esters 9003-29-6, Polybutene 9010-79-1,
Ethylene-propylene copolymer 25087-26-7D, Polymethacrylic acid, esters
26040-51-7 34832-88-7 **43177-43-1** 56720-20-8 68089-23-6
68089-25-8 74664-07-6 74849-79-9 109230-28-6 110867-32-8
110867-33-9 110867-34-0 110867-35-1 110867-36-2 110867-37-3
111043-70-0 111043-71-1 111043-73-3 111043-74-4 111043-75-5
111043-76-6 111043-77-7 111043-78-8 111043-79-9 122857-56-1
123322-62-3 126143-38-2 126143-39-3 126259-78-7
127177-77-9 129207-35-8 139469-55-9 159264-83-2 159264-84-3
159264-85-4
RL: **MOA (Modifier or additive use)**; USES (Uses)
(fire resistant hydraulic fluids)

IT **43177-43-1 123322-62-3**
RL: **MOA (Modifier or additive use)**; USES (Uses)

(fire resistant hydraulic fluids)
RN 43177-43-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(2,3,4,5-tetrabromo-6-carboxybenzoyl)-ω-methoxy- (9CI) (CA INDEX NAME)



RN 123322-62-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(2,4-dicarboxybenzoyl)-ω-[(2,3,4,5-tetrabromo-6-carboxybenzoyl)oxy]- (9CI) (CA INDEX NAME)



L38 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1989:24797 HCAPLUS
DN 110:24797
TI Curable **elastomer**-modified unsaturated polyesters for molding
IN Holoch, Jan; Georg, Gerhard; Demmler, Kurt
PA BASF A.-G., Fed. Rep. Ger.
SO Ger. Offen., 6 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C08L067-06
ICS C08K005-16
ICA C08J003-24; C08J005-00; C08J005-04
ICI C08K005-16, C08K005-10; C08K005-06
CC 37-3 (Plastics Manufacture and Processing)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 3704358	A1	19880825	DE 1987-3704358	19870212
EP 278444	A2	19880817	EP 1988-101762	19880206
EP 278444	A3	19890412		

R: DE, ES, FR, GB, IT, NL
PRAI DE 1987-3704358 19870212
AB The title compns., resistant to cracking, contain unsatd. polyesters, comonomers, 5-95% polyoxytetramethylene oligoesters chain-extended with diisocyanates, and customary additives. Stirring 560 g polytetramethylene

glycol and 17.4 g 2,4-TDI at 70-90° for 3 h, adding 19.6 g maleic anhydride, and stirring 3 h at 110° gave an oligoester (I) which was dissolved (550 g) in 235 g styrene containing 79 mg methylhydroquinone. Glass mats were impregnated with a mixture of I solution 20, 66% styrene solution of 392:1184:930 maleic anhydride-phthalic anhydride-1,2-propanediol 80, and dicumyl peroxide 2 parts, pressed (4 plies), and postcured 1 h at 140° to give a laminate with damage volume (dye testing after impact with a 760-g ball from a height of 75 cm) 150 mm3; vs. 1150 without I.

ST crack inhibitor polyester molding; polyoxytetramethylene maleate crack inhibitor; TDI urethane crack inhibitor

IT Crack
(inhibitors, polyoxytetramethylene urethane alkenoates, for unsatd. polyester moldings)

IT Polyoxyalkylenes, compounds
RL: USES (Uses)
(urethanes, alkenoates, crack inhibitors of unsatd. polyester moldings)

IT Polyesters, uses and miscellaneous
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(unsatd., moldings, crack inhibitors for, polyoxytetramethylene urethane alkenoates as)

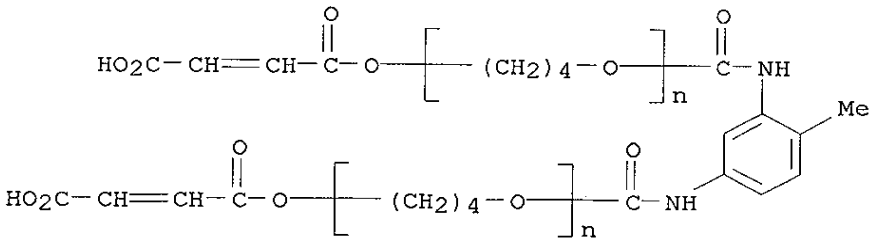
IT **118087-61-9 118087-62-0** 118145-42-9 118145-43-0
RL: USES (Uses)
(crack inhibitors, for unsatd. polyester moldings)

IT 26182-24-1 67939-16-6
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(moldings, crack inhibitors for, polyoxytetramethylene urethane alkenoates as)

IT **118087-61-9 118087-62-0**
RL: USES (Uses)
(crack inhibitors, for unsatd. polyester moldings)

RN 118087-61-9 HCAPLUS

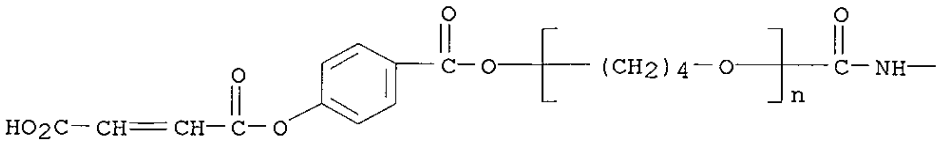
CN Poly(oxy-1,4-butanediyl), α,α'-[(4-methyl-1,3-phenylene)bis(iminocarbonyl)]bis[ω-[(3-carboxy-1-oxo-2-propenyl)oxy]-, (Z,Z)- (9CI) (CA INDEX NAME)



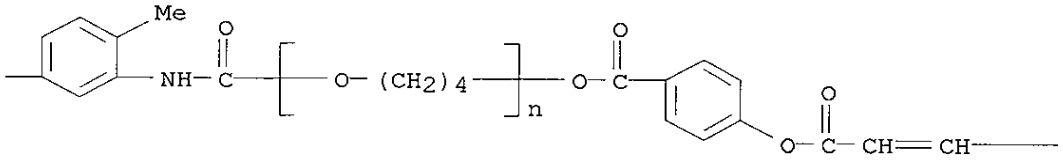
RN 118087-62-0 HCAPLUS

CN Poly(oxy-1,4-butanediyl), α,α'-[(4-methyl-1,3-phenylene)bis(iminocarbonyl)]bis[ω-[[4-[(3-carboxy-1-oxo-2-propenyl)oxy]benzoyl]oxy]-, (Z,Z)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



PAGE 1-C

— CO_2H

=>